UNION FORMATION AND DISSOLUTION IN FRAGILE FAMILIES

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Marcia Carlson
Sara McLanahan
Paula England

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Marcia Carlson
Columbia University

Sara McLanahan
Princeton University

Paula England
Northwestern University

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* Marcia Carlson (mjc2001@columbia.edu) is Assistant Professor of Social Work and Sociology at Columbia University. Sara McLanahan (mclanaha@princeton.edu) is Professor of Sociology and Public Affairs and Director of the Center for Research on Child Wellbeing at Princeton University. Paula England (p-england@northwestern.edu) is Professor of Sociology and Research Associate at the Institute for Policy Studies at Northwestern University. Sara McLanahan worked on this paper while she was a fellow at the Center for Advanced Study in the Behavioral Sciences with support from the William and Flora Hewlett Foundation. We are grateful to Jean Knab and Ofira Schwartz for data management and to Brenda Wang for assistance with table preparation. We appreciate the generous financial support of the Fragile Families and Child Wellbeing Study provided by a consortium of government agencies and private foundations (see end of paper for list of funders).[i]

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Abstract

In this paper, we use data from a new longitudinal survey—the *Fragile Families and Child Wellbeing Study*—to examine union formation and dissolution among parents subsequent to a nonmarital birth. We use generalized ordered logistic regression to examine the effects of economic and social/cultural variables on union formation and stability, using three different cut points: marriage, co-residence, and romantic attachment. Net of other factors (including baseline relationship status), we find that economic resources generally support union formation and stability among parents: men's employment and predicted earnings show positive effects, while women's education and actual earnings have such effects. Social and cultural factors also have net effects on union formation and stability: Positive attitudes about marriage encourage marriage. Women's gender distrust discourages—and the emotional quality of the relationship encourages—union formation and stability at each point on the hierarchy.

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INTRODUCTION

Out-of-wedlock childbearing has increased dramatically over the past four decades such that today, one-third of all births occur outside of marriage (Ventura and Bachrach 2000). The increase in nonmarital childbearing is closely related to the delay (and decline) in marriage, which has occurred over the past half century. Whereas in 1964 the median age at first marriage was 20.4 for women and 22.4 for men, by 1990 it was 24.0 and 25.9 respectively (Clarke 1995). Delays in marriage increase the pool of women who are at risk for a nonmarital pregnancy and ultimately nonmarital births. Declines in so-called "shotgun marriages" (those that occur between conception and the time of birth) have also led to increases in nonmarital childbearing. In fact, by one estimate, more than half of the increase in the proportion of births outside marriage between the 1960s and 1980s is due to decreases in the likelihood that a nonmarital pregnancy will be "legitimated" by marriage (Akerlof et al. 1996). Delays in marriage have been accompanied by increases in cohabitation. Hence, a growing share of nonmarital births now occurs to cohabiting couples. In addition, many unmarried parents who are not co-residing are nonetheless romantically involved with one another at the time their child is born. Taken together, these demographic trends have given rise to a new family form – *the fragile family* – defined as unmarried parents raising their child(ren) together.[1]

The increase in 'fragile families' is of great interest to sociologists and demographers. Marriage is one of the oldest institutions in Western society, and some researchers argue that marriage leads to a range of positive outcomes for adults and children (Nock 1998; Waite and

[1] The term 'fragile families' was first used by Ronald Mincy (Mincy 1994; Mincy and Pouncy 1997).

Gallagher 2000; McLanahan and Sandefur 1994; McLanahan 2002).[2] Changes in marriage are also of interest to scholars who care about stratification and inequality. Low-income individuals and members of disadvantaged minority groups are more likely to live in fragile families. Whereas women in the bottom two-thirds of the educational distribution have experienced large increases in nonmarital childbearing since 1970, women in the top one-third have experienced virtually no increase (Ellwood and Jencks 2002). Similarly, whereas only 22 percent of white children were born to unmarried parents in 1999, the proportions were 69 and 42 percent for African American and Hispanic children, respectively (Ventura and Bachrach 2000). Finally, fragile families are of great interest to policymakers. The Bush administration is currently proposing to spend more than one billion dollars over five years ($300 million per year) on programs to promote "healthy marriages" (McLanahan, Garfinkel, and Mincy 2001). Whereas some policy analysts suggest that marriage may obviate the economic disadvantage among low-income women, others argue that most poor unmarried mothers cannot find men with decent earnings to marry, and that marriage may even increase problems such as domestic violence for them. In order to understand the possible role for marriage in welfare reform, it is critical to understand the characteristics of unmarried parents and the factors that influence their relationship trajectories.

In this paper, we use data from a new longitudinal survey—the *Fragile Families and Child Wellbeing Study*—to examine union formation among unmarried parents in the first year subsequent to a nonmarital birth. We are interested in the full range of relationships that may develop among unmarried couples who have a child, including no romantic relationship, a

[2] There is some controversy about how much of these effects are due to pre-existing differences between the resources and characteristics of those who get and stay married versus those who are single.

romantic relationship that does not involve cohabitation, cohabitation and marriage. We predict these outcomes from a wide range of independent variables, including economic, social and cultural factors. In the following section we review the theory and empirical evidence on union formation and dissolution, with a special focus on low-income populations. Next, we describe the data, variables and methods used in our analyses and provide descriptive information about our sample. Finally, we present our multivariate results and discuss the implications of our analyses.

THEORETICAL PERSPECTIVES AND EMPIRICAL RESEARCH

Economic Factors

Theory. Most theorists believe that men's earning potential has a positive effect on marriage. There is less agreement, however, about the role of women's earnings. Predictions about effects of either sex's earnings on cohabitation are ambiguous. Economic theory features rational individuals making decisions based on potential gains, including material gains. Some of these incentive arguments make no distinction between the expected effects of women's versus men's earning power; others are gender-specific. The simplest reason to think that either men's or women's income might encourage marriage is that an individual with higher income has more to share with a potential partner.

Another incentive for marriage (or cohabitation) is the ability to share public goods (Lam 1988). "Public goods" are those with "nonrivalness in consumption," such that one more person using the good does not reduce its value to the first user. Household appliances and much of the space in an apartment generally meet this criterion. If two people share public goods, money is freed up for other things, providing an incentive for cohabitation or marriage. Moffitt (2000)

suggests that this incentive may be greater when incomes are higher because there are more public goods to share, although he concedes some theoretical ambiguity on this point.[3]

Other economic views see income to discourage relationships; people can use income to "purchase" privacy or freedom from onerous relationships. Just as income decreases the tendency of elders to live with their adult children or young people to live with their parents, individuals may use their earnings to eschew marriages if they don't offer enough non-economic fulfillment. When applied to women choosing to eschew or leave relationships, this is dubbed the "women's independence effect" (Oppenheimer 1988; Ruggles 1997). Yet, men too might also use some of their income to gain freedom, perhaps substituting more casual relationships and market homemaking services (a "men's independence effect").

Another material incentive for marriage is that one person's assets and earning power may provide insurance for the other, but whether this incentive goes up or down with income is ambiguous. On the one hand, high-income individuals can offer more insurance to their partners, and have more potential loss to insure against, so higher income might increase incentives for marriage. On the other hand, high income also can be used to buy insurance on the market, or, income can be used to "self-insure" through saving (if credit markets don't provide the right kinds of insurance), which suggests that high-income individuals need marriage less. Moreover,

[3] While we agree that the ability to share public goods creates an incentive for cohabitation or marriage, in our view, what economic theory predicts about the effect of incomes on this incentive is indeterminate. If the proportion of income people spend on public goods is invariant or decreases as income rises, then the *percentage* gains to marriage via public goods are constant or decreasing. Thus, one either needs to believe that the proportion of income spent on public goods increases with income, or that individuals make decisions based on absolute rather than percentage gains in order to think that the public goods incentive increases with income.

the poor are more likely to need insurance against conditions that truly threaten survival (Moffitt 2000; Ellwood and Jencks 2002).

Income of either the man or women might encourage marriage simply because the basic ability to afford an independent household increases with earnings. Parents who share a nonmarital birth but are not co-residing may be living with their parents and unable to afford a place of their own. Income may increase their ability to establish their own household.

The economic arguments above do not intrinsically distinguish between the expected effects of women's and men's incomes. In contrast, Becker's (1991) notion of gains from specialization predicts different effects of men's and women's earning power. Becker (1991) stresses that specialization is efficient. If one spouse (typically the man) specializes in market work, while the other (typically the woman) specializes in household work, including childrearing, the couple can produce more than they could without such a division of labor.[4] In this view, any economic forces that raise women's wage rates relative to men's will reduce both men's and women's incentives for marriage (Moffitt 2000).[5] Sociological perspectives

[4]Evolutionary psychology also makes gender-specific predictions, arguing that females have evolved an innate disposition to decide which men to marry or leave based on their ability (and commitment) to provide resources for their offspring (Daly and Wilson 2000). In fact, Becker's (1991) argument also needs some rationale as to why couples wouldn't be just as likely to specialize with women in the market and men at home. Becker grounds this largely in women's biologically-based comparative advantage for childrearing. It is odd that he doesn't emphasize employment discrimination against women more, since his earlier work was on racial discrimination.

[5] Another economic perspective that focuses on men and women's relative wages is bargaining theory (Lundberg and Pollak 1996). They focus on how access to resources from outside the relationship affects bargaining within the relationship as well as the propensity to leave; "voice" and "exit" are both based on resources. Exchange theory in sociology has similar implications (England and Kilbourne 1990). There are no clear implications of bargaining models for effects of earnings on marriage. On the one hand, individuals with more resources may have more

emphasizing norms also posit that men's earnings potential is a prerequisite for marriage, but women's is less important. If there is a social norm that men are supposed to be breadwinners in marriage, then when conditions in the economy make a group of men "unmarriageable" on this criterion, their marriage rates should decline (Oppenheimer 2000; Wilson 1987).

Whether predictions for cohabitation are the same as those for marriage depends on the theory. Public goods incentives apply to cohabitation as much as marriage (since both relationships involve sharing a household). Incentives involving insurance could apply to either but should more strongly affect marriage since the possible adversities one is insuring against are off in the future, and, thus, gains depend on believing that the relationship will last.[6] Income sharing and the ability to afford an apartment (if both are living with kin) should lead earnings to affect both cohabitation and marriage. Specialization can produce gains within either cohabitation or marriage, but since women jeopardize their future ability to support themselves or children by specializing in homemaking, it is risky to do so without some confidence in the man's commitment to stay, presumably increased by marriage; thus, specialization may encourage marriage more than cohabitation. Normative arguments about the male breadwinning role apply to marriage more than cohabitation because the norms are posited as specific to marriage; however, to the extent that cohabitation is seen as a trial marriage, women might take men's earning capacity into account in deciding whom to live with as well. Given these

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incentive to marry (or cohabit) because they will be in a better bargaining position within the union. On the other hand, they may be less likely to marry because they can afford to hold out for a better relationship.

[6] The median duration of a cohabiting relationship is only 1.3 years; yet 53 percent of cohabiting unions result in marriage (Bumpass and Lu 2000). The cohabitors who later transition to marriage may have a longer time horizon for the relationship.

considerations, we might expect men's earning power to encourage both cohabitation and marriage, but to have stronger effects on marriage.

Empirical Evidence on Economic Factors. What is the evidence about the effects of men's and women's earning capacities on marriage or cohabitation? Most evidence shows a positive association between men's earnings and marriage. Cross-sectional or SMSA analyses and individual-level analyses both show a positive relationship between men's earnings and marriage (Lloyd and South 1996; Oppenheimer et al. 1997; Oppenheimer 2000; White and Rogers 2000; Lichter et al. 1991; Lichter et al. 1992; Mare and Winship 1991; Xie et al. forthcoming; see Ellwood and Jencks 2002 for a review).

Just as theory generates inconsistent predictions about the effects of women's earnings on marriage, the empirical research is also inconsistent. Studies based on aggregate data have generally found that marriage is less common in areas where women's economic prospects are good (high wages and high employment) (Lichter et al. 1991; South and Lloyd 1992). In contrast, studies based on individual-level data have found that women with higher earnings potential (generally assessed by education) are *more* likely to marry than women with lower earnings potential (Lichter et al. 1992; Oppenheimer 1988; Goldstein and Kenney 2001; White and Rogers 1999; Xie et al. forthcoming). Both types of studies have been criticized for specification bias (Ellwood and Jencks 2002). The tendency of metropolitan areas with higher women's earnings to have lower marriage rates could be due to the fact that women's earnings lead to less marriage, or it could mean that less marriage leads to more female employment and hence higher earnings. In individual-level studies, women's earnings (education) has a positive effect on marriage. However, without information on potential partners' earnings (not available

in these studies), we cannot rule out the possibility that women's earnings or education is just a proxy for potential partners' earning power.

There is less research on how economic status relates to cohabitation, and the evidence is inconsistent. Some studies show men's but not women's earning power to be positively related to cohabitation (Clarkberg 1999, Smock and Manning 1997). Ethnographic work by Edin and Lein (1997) argues that poor women enforce a "no pay, no stay" requiring men to contribute economically as a criterion for cohabitation. High male earnings are also associated with the transition from cohabitation to marriage (Bumpass et al. 1991; Manning and Smock 1995; Smock and Manning 1997). Since divorce is lower when men's earnings are higher (Hoffman and Duncan 1995; South and Lloyd 1995) or rising (Weiss and Willis 1997), we might predict a similar effect for the breakup of cohabiting relationships; consistent with this, Wu and Pollard (2000) find that economic resources are associated with stability—and deprivation with instability—in cohabiting unions. However, one study finds a negative relationship between accumulated schooling and entering a cohabiting union (Thornton et al. 1995), while another finds no relationship between economic potential and entering cohabitation for either men or women (Xie et al. forthcoming). Focusing on the relative distribution of men's and women's resources within couples, Brines and Joyner (1999) report that differences between partners' earnings in either direction (but especially if women's are higher) predict breakup among cohabitors but not among married couples.

Social and Cultural Factors

We have discussed how cultural norms about the breadwinner role for men might affect the link between economic factors and marriage. But culture—defined as widely shared beliefs

and practices—can also have direct effects on decisions about marriage and childbearing. Most researchers agree that the 1960s and 1970s were a watershed period for changes in norms and practices governing the family (Cherlin 1992). Widespread changes in family-related behaviors, such as increases in sexual activity, childbearing and co-residence outside marriage, delays in marriage, and increases in divorce, were accompanied by dramatic changes in the social acceptance of all of these behaviors. For example, Axinn and Thornton (2000) report that the proportion of women who said premarital sex is wrong declined from 56 to 42 percent between the mid-1970s and mid-1990s, and the percent of women who agreed that living together is a good idea rose from 33 to 51 percent over the same time period. While it is difficult to know which came first – changes in beliefs or changes in practices – there is some evidence that they are mutually reinforcing, and that, once in place, cultural forces take on a life of their own, influencing the marital behavior of the next generation of young adults (Thornton 1991; McLanahan and Bumpass 1988; Axinn and Thornton 1993; Axinn and Thornton 2000; Thornton and Camburn 1987). However, since cultural change is neither uniform nor uncontested, we would expect some groups to cling longer to traditional views. Religion has been one source of resistance to the liberalization of sexual norms and behaviors that were celebrated in the 1960s. Thus, we would expect religious belief and affiliation (particularly with fundamentalist denominations) to encourage marriage and to discourage cohabitation and childbearing outside marriage (Wilcox 2002).

Culture has also changed substantially vis-à-vis gender-related norms. Women's employment within marriage has become more acceptable. Yet, cultural associations of marriage with male authority may today discourage marriage among those with egalitarian gender beliefs.

Some studies have focused on cultural aspects of marriage and family formation as related to race/ethnicity. Orlando Patterson (1998) uses gender conflict to explain the high rates of non-marriage and single parenthood among African Americans. He attributes gender conflict to the institution of slavery that, he argues, denigrated men's family roles. While the caregiving role of mothers was reinforced under slavery because it facilitated the regeneration of the slave population, without legal or civil rights men had no capacity for economic provision that was (and remains) central to fulfilling the roles of husband and father. Whether race differences in marriage are "culturally" determined is hotly debated. Tucker (2000) argues that African Americans place a high value on marriage while also emphasizing the need for men to be good breadwinners; given the low socioeconomic status of many African American males, the combination of these values leads to lower marriage rates. In addition, having children by multiple partners is more common among African Americans, and this multiple-partner fertility may also help account for the low marriage rates among this group (Mincy 2002). But, another possibility is that gender conflict is greater in African American and other poorer communities because male earnings power has been eroded by adverse economic changes. Women may resist male authority and be particularly distrustful of men whose claim to authority is not accompanied by economic contributions. Yet, working class and poor men whose ability to meet culturally-defined definitions of masculinity through earnings is most threatened may be more likely to try to seize such authority on the basis of their sex in intimate unions precisely in reaction to their inability to get it anywhere else. If this is true, recent economic changes may have enhanced gender distrust in African American and working class communities in which fragile families are concentrated.

Together, the cultural arguments suggest that couples with traditional pro-marriage values and traditional gender role attitudes are more likely to marry and stay married than couples with less traditional values and gender roles. This argument is consistent with previous research (Clarkberg et al. 1995; Sassler and Schoen 1999). Cultural arguments also suggest that gender conflict and mistrust are important factors in predicting marriage and marital stability. Since cohabitation is a "looser bond" (Schoen and Weinick 1993) or an "incomplete institution" (Nock 1995) with roles that are less scripted by gender or family expectations, we would expect these factors to affect marriage more than cohabitation. Consistent with this argument, individuals who cohabit are typically more politically liberal, less religious, and more favorable toward nontraditional family roles than those who do not cohabit (Thornton et al. 1992; Smock 2000). It is less clear how traditional beliefs would affect the decision of unwed parents to move into cohabitation relative to living apart, and ours is the first study to examine this question.

Finally, given the growing cultural emphasis on marriage as a source of love and companionship rather than an economic exchange, we would expect the emotional quality of a couple's relationship to affect the movement from dating to cohabitation and from either dating or cohabitation to marriage. Many studies from psychology and sociology show that partners' perceptions of the emotional quality of marriages affect whether they stay together or break up (Booth et al. 1985; Sayer and Bianchi 2000; Sanchez and Gager 2000; Cowan et al. 1994; Gottman 1994; Karney and Bradbury 1995). Drug or alcohol abuse, infidelity and violence within marriage are strongly associated with low marital quality and with divorce (White 1990; Sayer and Bianchi 2000; Amato and Rogers 1997; Sanchez and Gager 2000; Kurtz 1995). We would expect that the same factors that break up marriages would also break up romantic

relationships among unwed parents, and thereby prevent them from moving into cohabitation or marriage.

DATA AND METHODS

We use data from the Fragile Families and Child Wellbeing Study, a new national study designed to provide a longitudinal examination of unmarried mothers and fathers, the relationships between them, and the consequences for children. The study follows a birth cohort of 3,700 children born to unmarried parents (and a comparison group of 1,200 children born to married parents) in twenty large U.S. cities. The sample, when weighted, is representative of all nonmarital births to parents residing in cities with populations over 200,000.

Baseline interviews with mothers and fathers were conducted shortly after their child's birth. Mothers were interviewed in person in the hospital within 48 hours of the birth, and fathers were interviewed in person as soon as possible thereafter, either in the hospital or wherever they could be located. Follow-up interviews with both mothers and fathers occur when the child is about one, three and five years old. At each follow-up interview, data are/will be collected on many topics, including child health and development, parents' relationships with each other, mother-child and father-child interaction, parents' attitudes and behaviors, parents' socioeconomic status, family environment and use of public programs. Data collection in the Fragile Families Study is staggered across the twenty cities. As of Spring 2003, baseline and one-year interviews have been completed in all twenty cities, and the three-year follow-up survey is in the field. Response rates for the baseline survey are 87 percent for unmarried

mothers and 75 percent for unmarried fathers.[7] At the one-year follow-up, 89 percent of unmarried mothers and 79 percent of unmarried fathers who had been interviewed at baseline were interviewed again. In this paper, we use data from the baseline interviews with unmarried mothers and fathers, and one-year interviews with mothers, in all twenty cities in the Fragile Families Study.[8] Our sample includes 3,279 couples that were unmarried at the time of their baby's birth and for whom the mother provided a report of their relationship status approximately one year later.

Variables

Our dependent variable is union status approximately one year after the child's birth. We combine several pieces of information about parents' relationships reported by mothers at the one-year follow-up survey: mothers are asked about their marital status, cohabitation status, and the type of relationship they have with the baby's father (romantic, friends, separated, or no contact). From this information, we develop mutually exclusive and exhaustive categories of:

[7] The Fragile Families data are most representative of cohabiting fathers (almost 90 percent response rate) and least representative of fathers who are not romantically involved with the child's mother at the time of birth (38 percent response rate). Among the latter group, the men who participated in the study may well be a select group of those unusually committed to the child and/or the mother.

[8] The twenty cities are: Oakland, CA; San Jose, CA; Jacksonville, FL; Chicago, IL; Indianapolis, IN; Boston, MA; Baltimore, MD; Detroit, MI; Newark, NJ; New York City, NY; Toledo, OH; Philadelphia, PA; Pittsburgh, PA; Nashville, TN; Austin, TX ; Corpus Christi, TX; San Antonio, TX; Norfolk, VA; Richmond, VA; and Milwaukee, WI.

married, cohabiting, "visiting" (romantically involved but living apart),[9] and not in a romantic relationship (friends, separated, or no contact).[10]

Our independent variables include background characteristics, indicators of parents' economic resources, parents' attitudes and beliefs, and parents' relationship quality; all variables are from the time-of-birth interview, except parents' fertility history, which was only available at the one-year follow-up. Unless otherwise indicated, we include identical variables for both mothers and fathers. Mothers' and fathers' ages are each specified as continuous variables. As 86 percent of couples are of the same race/ethnicity, we include mother's race specified as a series of dummy variables: non-Hispanic black (the reference category), non-Hispanic white, Hispanic, and other race. We include a separate dummy variable indicating when the parents differ on race/ethnicity (14 percent). Family background is represented by a dichotomy for whether each parent lived with both of their parents at age 15. Parents' fertility history is represented by variables indicating that the parents have other biological children together, mother has other children with another partner, and the father has other children by another partner (these variables are not mutually exclusive). Since health may affect relationship formation, we also include measures of mothers' and fathers' self-reported health status as a continuous variable, ranging from 1 "poor" to 5 "excellent."

Several variables represent parents' economic resources or potential. Our main models use a predicted hourly wage rate for mothers and fathers. We chose this over actual wages because of substantial missing data on the wage measure, and because a predicted wage based on

[9] The notion of visiting is similar to what some European demographers call "living apart together" (Toulemon 1997).

[10] We use mothers' reports of relationship status instead of fathers' reports, since doing so gives us a larger sample. For couples where both the mother and father were interviewed, 78 percent agree on their relationship status.

a large number of indicators[11] is more likely to reflect long-range earnings potential than a current wage, particularly in this young sample where employment is often quite unstable. However, we also present some alternative specifications of our models using actual wage rates for comparison (see Table 4).[12] Education is specified as three dummy variables – less than high school (reference category), high school degree, and some college or higher. Fathers' employment status is a dummy variable for whether the mother reported that the father worked in the week prior to the baby's birth. Mothers' employment status represents whether she reports having worked in the previous year.[13]

We include several items reflecting parents' attitudes and beliefs. Parents' attitudes toward marriage are determined by the average score of their responses to three statements about the importance of marriage: 1) "It is better for a couple to get married than to just live together", 2) "It is better for children if their parents are married", and 3) "Living together is just the same as being married" (coding reversed); responses range from "strongly disagree" (1) to "strongly agree" (4). We combine responses into a single measure ranging from 1 to 4 (Cronbach's alpha=.57 for both mothers and fathers). Traditional attitudes toward gender roles are measured

[11] The predicted wage equation includes the following variables: age, education, race/ethnicity, immigrant status, health (overall health for mothers and whether has condition that limits work for fathers), substance problem, and city of residence at the time of the baby's birth; for mothers, we also include a dummy variable indicating whether this is her first birth (similar information is not available for all fathers at baseline); the R-squared for the mother's predicted wage equation is 0.29 and for the father's is 0.26.

[12] Actual wages are specified as an hourly wage rate, calculated from parents' reports about how much they earned in their most recent job and converted to an hourly rate if given for another time period.

[13] Since mothers were about to give birth a week prior to the baseline survey, worked-last-week is an inferior indicator of mothers' employment history or trajectory.

by two questions with the same response choices ("strongly disagree" to "strongly agree"): 1) "The important decisions in the family should be made by the man of the house," and 2) "It is much better for everyone if the man earns the main living and the woman takes care of the home and family" (alpha=.56 for mothers and .51 for fathers). Parents' distrust of the opposite sex is represented by their mean report across two indicators: 1) "Men (women) cannot be trusted to be faithful," and 2) "In a dating relationship, a man (woman) is largely out to take advantage of a woman (man)." Again, response choices range from "strongly disagree" (1) to "strongly agree" (4), and the two items are combined into a single measure (alpha=.58 for mothers and .64 for fathers). We include the frequency of each parent's religious attendance as a continuous variable, ranging from 1 "not at all" to 5 "once a week or more."

We include several measures reflecting the quality of parents' relationship at the baseline survey. Physical violence is represented by a dummy variable coded as 1 if the parent responds that the other parent "often" or "sometimes" "hits or slaps [her/him] when [he/she] is angry." Frequency of conflict is represented by the mean of parents' reports about whether they "never" (1), "sometimes" (2), or "often" (3) had conflict over six items in the last month—money, spending time together, sex, the pregnancy, drinking or drug use, and being faithful (alpha=.64 for mothers and .61 for fathers). Supportiveness in the relationship is measured by each parent's report about the frequency that the father (mother) exhibits four types of behavior: 1) "is fair and willing to compromise when [they] have a disagreement," 2) "expresses affection or love toward [her(him)]," 3) "insults or criticizes [her(him)] or [her(his)] ideas" (coding was reversed), and 4) "encourages or helps [her(him)] to do things that are important to [her(him)]." Again, response options are "never" (1), "sometimes" (2), and "often" (3). The four items were averaged to obtain an overall supportiveness score (range=1 to 3), with higher scores indicating a greater level of

supportiveness (alpha=.66 for mothers and .60 for fathers). [14] Finally, whether the father has a substance abuse problem is indicated by the mother's report that the father "[has] problems such as keeping a job or getting along with family and friends because of alcohol or drug use." Mothers also report on their own substance problems by responding (yes/no) to the question "In the past year, has drinking or using drugs ever interfered with your work on a job or with your personal relationships?"

Finally, we include parents' relationship status at the time of the baby's birth represented by two dummy variables for whether they were visiting or cohabiting (with not romantically involved as the reference category). A correlation matrix to show bi-variate relationships among all variables is included in Appendix B.

Methods

For our multivariate analyses, we use generalized ordered logistic regression.[15] This method uses maximum-likelihood estimation to predict the likelihood of being above certain cut-points in an ordinal dependent variable. Our dependent variable is the couple's relationship status approximately one year after their child's birth. We take the categories of not romantically involved, "visiting" (romantically involved but not co-residing), cohabiting, and married to be an ordinal variable representing the degree of togetherness and commitment as a couple. The model estimates the likelihood that a couple is above each of the three cut-points between these categories. The ordered logit model is different from the multinomial logit model. Whereas the

[14] For couples who are no longer romantically involved, they are asked about supportiveness and the frequency of conflict during the last month they were together; since this was likely a contentious time in their relationship, differences between couples still together versus those no longer romantically involved may be exaggerated.

[15] We thank Ronald Mincy for suggesting we use this particular statistical model.

latter compares the effect of a given variable on the likelihood of being in a particular category relative to the reference category, the former examines the effect of a given variable on the likelihood of being above a particular cut point. In the ordered logit model, the reference category is *all respondents below the cut point*. The generalized ordered logit model relaxes the proportional odds assumption and allows each independent variable to have a different effect on being above each cut point.[16] For each of our three "cut-points" on the relationship spectrum (romantic, co-resident, and married), we estimate three models. The first model includes the background and economic variables. Model 2 adds relationship status at baseline. Model 3 adds the variables representing parents' attitudes and quality of relationship at the time of the birth. The coefficients in models 2 and 3 can be interpreted as the effects of parents' characteristics on *change*s in relationship status between baseline and the one-year follow-up interview.

None of our respondents was married at baseline, and thus the coefficients for the marriage cut point are driven entirely by the transition into marriage. In contrast, the coefficients for the first two cut points – romantic involvement and co-residence – are driven by movement in both directions along the relationship spectrum.

Assumptions about causal ordering. As we report our results, we discuss the extent to which attitudes and relationship quality mediate the effects of economic variables on union formation and stability (comparing models 2 and 3). In doing so, we assume that the economic variables (measured at baseline) are exogenous to the attitude and relationship quality variables (also measured at baseline). This assumption is based on previous studies, which suggest that changes in economic status affect both marital quality and marital stability (White and Rogers

[16] We performed the Wald test of proportional odds, which confirms that the relationships among our variables cannot be appropriately modeled with a single parameter for each independent variable.

2000).[17] Of course it is possible that the causal order is going the other way, with attitudes and relationship quality affecting economic status. While we believe our specification is correct, we cannot test this assumption with our data.

Missing data. We use several procedures for dealing with missing data.[18] Among items reported by mothers, for any variables with more than 10 missing observations, we impute the missing cases to the overall mean for all unmarried mothers at the baseline interview and include a flag variable to indicate the case has missing data on a particular variable. For father-reported variables, we follow a similar procedure. In addition, in cases where the father was not interviewed and where we had no information on the father from the mother, we created a dummy variable to indicate that a father did not participate in the baseline survey.

RESULTS

Table 1 reports descriptive statistics (means and standard deviations) for our sample of parents who were unmarried at the time of their child's birth (*n*=3,279); we provide overall means and separate means by relationship status at birth.[19] As noted above, all variables are reported at the time of the baby's birth (baseline interview), except parents' fertility history and

[17] However, subjective economic measures are more strongly related to marital quality than objective measures. See White and Rogers (2000) for a discussion of why this might be.

[18] Missing data do not pose a serious problem in our sample. Less than five percent of cases are missing on nearly all variables; variables with greater than five percent missing are: father's employment status, reported by mothers (12 percent missing), and whether father has children by another partner, reported by fathers (16 percent missing). Also, since not all parents had recent work experience, they do not all report an actual wage rate (used in our analyses for Table 4); wages are reported by 72 percent of mothers and 86 percent of fathers.

[19] We do not use sampling weights in Table 1 as the weights for the one-year survey are not yet available.

the relationship status when the baby is about one year old, which come from the one-year follow-up survey. Parents' characteristics vary substantially by relationship status at birth.

Table 2 shows a cross-tabulation of parents' relationship status at the birth of their baby and approximately one year later. Among unmarried couples, cohabiting relationships are much more stable over time than other types of relationships, including those where the parents are romantically involved but living apart. Overall, three-fourths of couples who were cohabiting at the time their child was born remain in a co-residential union about one year later—15 percent are now legally married to each other, and 60 percent are still cohabiting.[20] Being romantically involved but living apart at the time their child was born (which we refer to as "visiting") appears to be a very unstable status: only 14 percent of parents in this category remain there one year after the child's birth. Thirty-seven percent of visitors have "moved closer " in their relational involvement—32 percent are cohabiting, and five percent have gotten married. Yet, nearly half of those who were visiting at baseline are no longer romantically involved—about one-quarter are friends and another quarter report that they had no relationship (i.e. "hardly ever" or "never" talk to the father, which probably implies that he does not visit the child).[21] Of those who began as friends, 44 percent report that they remain friends one year later, and 14 percent report that they are romantically involved one year later (4 percent visiting, 9 percent cohabiting,

[20] Thirty-one mothers who are no longer in a romantic relationship with the focal child's father report that they have married another partner by the one-year follow-up interview. Since the focus of our analysis is the biological parents' relationship, these cases are coded as not romantically involved.

[21] Few couples moved **into** the visiting category within one year of a nonmarital birth; this is largely because couples who are cohabiting and decide to stop cohabiting typically break up completely. Also, only a small fraction of all non-romantically involved couples at baseline enter any category of romantic relationship by one year later, and only a sub-set of this group identifies themselves as visiting.

and 1 percent married). Finally, of the small number of mothers who had no relationship at the time their child was born (indicated by their report that they "hardly ever" or "never" talk to the father), about two-thirds still have no relationship one year later, and 23 percent say they are friends. Surprisingly, a small but non-trivial fraction of such couples (12 percent) are now romantically involved, including two percent who got married.

Results from our regression analyses are shown in Table 3. Coefficients for background control variables are presented separately in Appendix A. Model 1 is presented for largely descriptive interest; it includes earnings-related variables but not baseline relationship status. Model 2 controls for relationship status at baseline; this implicitly controls for unobserved variables that may be correlated with baseline characteristics and relationship status at time 2 and, thus, allows for more confident causal interpretations. The coefficients in this model can be interpreted as measuring the effects of background and economic variables on *changes* in parents' relationship status. Model 3 adds the attitudes and relationship quality variables and allows us to examine the extent to which the economic variables are mediated by attitudes and relationship quality.

What is the effect of economic factors on union stability and persistence? Certainly, past literature would lead us to expect that men's earnings potential is important to union formation and stability. As noted in the literature review, theory is more ambiguous on what we would expect for women's earnings potential. According to Table 3, neither women's employment nor their predicted wages appear to affect union formation or stability in any of our models. In contrast, women's education has mostly positive effects, especially having a high school degree. The results for men are different. Men's employment has a positive effect on co-residence and marriage (model 2) and men's predicted earnings have a positive effect on marriage (models 2

and 3). Some of the effect of men's employment appears to operate through attitudes and relationship quality; note that the coefficients are smaller in model 3 than they are in model 2. In contrast, the effects of men's education are never significantly positive, with the exception of having a college degree, which has a positive effect on marriage (model 2). Again, part of the positive effect of men's college education appears to operate through attitudes and relationship quality, as the coefficient is reduced between Models 2 and 3.

Table 4 shows results from some alternative specifications of the economic variables. First we estimate a model that uses predicted wages but excludes employment status. Next, we estimate two models that replace predicted wages with actual wages. Using the actual wage reduces our sample size from 3,100 to 1,600 births, since many mothers did not work in the year prior to giving birth. Next, we estimate two models that use the ratio and sum of mothers' and fathers' wages. And finally, we examine the effects of parents' education without employment or wages in the model. According to Table 4, excluding employment status does not affect our estimates of the effects of parents' predicted earnings on relationship transition; either way men's but not women's predicted earnings encourage the odds of marriage by 5 to 6 percent. However, restricting the sample to parents with actual earnings does make a difference; Table 4 shows that, in the sub-sample of couples where women are currently employed, women's predicted wage encourages cohabitation (while it did not in Table 3, where the effect of all women's predicted wage was assessed). Replacing predicted wages with actual wages makes an even greater difference. According to the third specification (actual wages without employment), women's wages increase marriage, cohabitation, and romantic involvement, whereas men's wages have no effect. Overall, it is hard to know what to make of the findings that men's

predicted wages affect marriage, but women's actual wages encourage union formation and stability at each cut point.[22]

Table 4 also reports estimates from a model that includes the ratio of parents' wages and the sum of their wages. This specification is designed to test Becker's notion that the gains to marriage come from specialization. If Becker's argument were correct, we would expect to see more marriage when the relative wage rate is high. Table 4 shows that the sum of parents' predicted wages encourages marriage, whereas the ratio of parents' wages has no significant effect. The additional specifications for the education variables do not substantially change the conclusions based on Table 3. The safest conclusion seems to be that earnings or earning power seem largely to encourage relationships and almost never to significantly hurt them, whether they come from men or women.

Next we consider the effect of cultural attitudes on relationship status. Model 3 in Table 3 shows that positive attitudes about marriage held by either the mother or father encourage marriage but do not affect cohabitation or romantic involvement. Traditional gender role attitudes have no discernible effect on relationship status when held by mothers, but encourage romantic involvement (though not cohabitation or marriage) when held by men.

When women report high gender distrust, it is a strong deterrent to unions at each level of relationship. The effect is particularly strong for marriage: each one-point increase on the gender distrust index decreases the odds that the mother is married by 40 percent. In contrast, fathers' distrust of women does not appear to matter for the relationship outcomes. Church attendance by both mothers and fathers is strongly associated with marriage but has no significant effect for the

[22] The issue appears not to be which subsample has missing data for actual wages, since when we take the sub-sample with non-missing wage data, but use the predicted rather than actual wage (Table 4), we get a similar coefficient as in Table 3 for the effect of men's predicted wage on marriage (1.06 and 1.05), although it falls just below statistical significance.

other relationship statuses once relationship at the time of the baby's birth is controlled. (We also estimated models without controlling for the earnings capacity and relationship quality variables and found that the effects of attitudes and religiosity were generally the same.) In sum, church attendance and attitudes about marriage and gender relationships affect family formation behavior. Overall, the cultural indicators for both parents are more strongly related to marriage than the other levels of relationship; the exception to this is mothers' gender distrust, which is a strong deterrent to getting/staying together at each level of relationship.

The last set of variables in Table 3 measures the effects of parents' perception of relationship quality on union formation and stability. Our measures of relationship quality include (1) physical violence, (2) conflict, (3) supportiveness, and (4) problems with substance abuse. Substance abuse is included with the relationship variables because of its association with violence and abuse. Unlike the attitudinal measures, all of the relationship quality indicators are couple-specific; that is, they are based on what parents say about how they get along and how they treat one another.

Fathers' physical violence is a significant deterrent to couples' romantic involvement; if the mother reports that the father sometimes or often hits her, the odds of staying in a romantic relationship are lower. Yet, surprisingly fathers' violence is positively and significantly associated with co-residence. This finding is driven by a very small number of Hispanics; therefore, we do not put too much credence on this result. Men's violence has no significant effect on marriage.

We find a very powerful effect of supportiveness on parents' relationship status. Each parent was asked how frequently the other parent was supportive in ways such as expressing love and affection and providing encouragement. Since the two measures are of different constructs

(him about her and her about him), it is not surprising that the correlation is quite low (r=.26). Yet, each parent's report of supportiveness has a strong positive effect on each level of union status. These effects are *net of* the couple's initial relationship status, indicating that living arrangements are not a direct proxy for the quality of interaction between the couple. In all cases, "better" relationships promote staying together or moving "up" the relationship spectrum.

Finally, there is a negative effect of fathers' substance problems on moving into or maintaining a co-residential union. Mothers are particularly reticent to move in (or stay) with a man who has a substance problem. Holding constant the parents' relationship at the time of the baby's birth, mothers who report that the father has a substance problem are 57 percent less likely to be living with the father a year later.

Not surprisingly, fathers who were not interviewed at the baseline survey are less likely to experience a positive relationship transition and more likely to experience a negative transition. Some of this effect goes away once we control for relationship status at birth. Finally, couples that were cohabiting or in a visiting relationship at birth are much more likely to be together one year later than couples who were not cohabiting.[23]

Effects of our fertility-related control variables are also of substantive interest (shown in Appendix A). Not surprisingly, parents who have had another child together are more likely to stay together, co-reside, or marry. What is surprising is that if the mother has a child by another man it has no effect, whereas fathers' children by previous partners have a negative effect at each relationship cut point, reducing odds of being together by 25 of 37 percent. One might have expected women's children to have a stronger effect, since they are the ones that generally co-

[23] We also explored whether there are differential effects for cohabiting couples who live with the baby's maternal grandparent(s), since this may indicate that the family is more fragile than cohabitors living independently (results not shown). We found essentially no difference between the two groups on union formation, except that cohabitors

reside with the couple. Future research should explore whether men's children deter future relationships because of child support obligations, because they index his disinclination to commit to one woman, or because women are wary of his possible continuing romantic involvement with his other children's mother.

Robustness of Results

We conducted a series of analyses to determine the robustness of our results to different samples and different sub-populations. (Results are not shown but are available upon request.) First, we looked at what difference it would make to include so-called "shotgun marriages" (those that occur between conception and time of birth) in our sample of unmarried parents. Adding these couples to the sample did not alter the pattern of results in our main analyses. However, the economic variables (particularly predicted wage rates) became more strongly associated with marriage at 12 months when we included couples who married prior to the birth. This finding is not surprising, since couples with higher socioeconomic status are more likely to have married between conception and birth.

We also explored differences in our results by race/ethnicity (both in our main analyses in Table 3 and the alternate specifications shown in Table 4, all focused on Model 3, with all variables included).[24] The interactions did little to challenge our general conclusion that earnings or earnings potential almost never hurt and often help relationship formation and stability, whether they come through the woman or the man. With only sporadic exceptions, effects are zero or positive for most groups at most cut points. Turning to the attitudes and relationship

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living with grandparent(s) around the time of the baby's birth were slightly more likely to be romantically involved one year later than those cohabiting couples living independently at the time of the birth.

[24] Given the small size of the "other" race group, we were not able to include those cases in our analyses of race interactions.

quality variables, we found that the positive effects of attitudes on marriage are especially strong for black fathers and that the positive effects of gender role attitudes on romantic involvement come entirely from white fathers and Hispanic parents. We also found that father's gender distrust discourages co-residence among whites. The negative effects of mother's gender distrust—and the positive effects of parents' relationship quality on every level of relationship—are present for all groups.

DISCUSSION AND CONCLUSIONS

The analysis presented above was designed to examine the effects of economic and social/cultural factors on union formation and dissolution. Our research extends previous research in several ways. First, we examine a much broader set of variables than previous studies have done, including measures of attitudes and relationship quality along with measures of economic status. Second, our data include information on the characteristics of both partners. Finally, whereas most researchers have examined the transition to marriage among cohabiting parents, we examine three different "cut points" in the relationship hierarchy: romantic involvement, co-residence, and marriage.

With respect to the economic variables, our major finding is that men's employment and predicted earnings encourage union formation and stability, while women's actual earnings and education have a similar effect. Thus, measures of earnings capacity of either partner appear almost never to discourage and sometimes to encourage staying together and moving into a co-residential or marital union. The pattern of these findings suggests that specialization is not critical for the stability of fragile families—but that resources are. Whether resources help in ways depicted by economic theories regarding public goods and insurance, or because they allow

conformity with cultural norms about what couples should have achieved in order to cohabit or marry is an important question for future research.

We also show that social and cultural factors have powerful effects, net of economic status and net of couples' relationship at the time of birth. First, pro-marriage attitudes and church attendance increase the chances of marriage. Second, distrust of men (by women) has a negative effect on union formation. As far as we know, ours is the first study to document this fact using nationally representative data. (See Furstenberg [2001] and Edin [2000] for qualitative accounts). Third, we find strong evidence that the emotional quality of relationships affects union formation and stability. Although psychological studies have documented a strong association between relationship quality and marriage, these findings have not been replicated on a large data set or with a population of unmarried parents. Feeling supported by a partner is very important for relationship status, even after we control for parents' earlier co-residential status. Moreover, supportiveness appears to be more important for a relationship than disagreement/conflict. The latter finding is consistent with the notion that disagreement and conflict are not necessarily harmful if they occur in the context of a generally supportive relationship (Gottman 1994). Living together at the time of a new child's birth is a strong predictor of union stability. Finally, we note negative effects on union formation or stability when the father (but not when the mother) has had one or more children with a previous partner.

Overall, our results provide support for the notion that relationships can be arrayed on a continuum of sorts, with both similarities and differences in the predictors that are most salient for particular statuses.[25] Marriage is the highest 'level' of relationship since it implies the greatest commitment and is the most difficult status to exit. Our results support previous

literature demonstrating that marriage is selective of individuals with the highest socioeconomic resources; in our analyses, the effects of male wages and college education are most clearly noted for marriage.[26] Yet, economic resources are also important at lower levels on the spectrum; fathers' employment seems to be especially important for living together, and mothers' actual wages are strongly related both to being romantic and to co-residing (and somewhat so for marriage). At the lowest 'level' of relationship, we note that two specific factors are associated with breaking up – the mother reporting the father is physically violent and the father's report of conflict in the relationship. Therefore, while taken together, our analyses point to the importance of economic resources and high-quality relationships, we observe differences in the particular nature of some effects—or their magnitude—across the continuum.

Our research is relevant to policymakers' current interest in encouraging (or at least not discouraging) marriage among low-income couples. Our regression results shed some light on the individual-level effects of parents' economic and relationship characteristics on the likelihood that they will marry. Yet, it is also important to know whether marriage would be notably altered at the population level if a policy intervention *could* in fact change parents' attributes (a non-trivial assumption). To evaluate this question, we conducted simulations to predict the proportion of unmarried parents that would be married under various conditions. We find that if parents' relationships could be improved such that both parents reported the highest level of supportiveness from the other parent, the estimated proportion of couples that married within one year of a nonmarital birth would increase from 10 percent to 13 percent. Raising both

[25] This corroborates related research suggesting that familial attachment should today be conceptualized with more fluid and overlapping boundaries between the statuses of marriage and cohabitation (Ross 1995; Smock and Gupta 2000).

[26] To the extent that our results are less consistent on this score, it may be because we are focusing on couples' union formation decisions *after* a nonmarital birth, which is itself selective of lower socioeconomic status (Hoffman and Foster 1997).

parents' average predicted (hourly) wage rate by 25 percent would yield a one percentage-point increase in marriage. The same one-point increase would be observed if all fathers were employed at the time of their baby's birth. If all three factors were changed simultaneously—relationship quality, wage rates, and fathers' employment—the proportion of parents who got married by the time their child was a year old would rise by five percentage points, from 10 percent to 15 percent. This simulation exercise demonstrates that the magnitude of the effects described above is actually quite small when considered at the macro level. Even large-scale changes in couples' earnings and quality of relationship are likely to yield relatively small changes in the proportion of unmarried parents who get married.[27]

In conclusion, our results provide information relevant to recent policy proposals that seek to promote healthy marriages by stressing the value of marriage and improving parents' communication and relationship skills. Descriptive data from the baseline survey make clear that most unmarried parents need no convincing that marriage is desirable; most say they want to and plan to marry. Programs aimed at convincing them that marriage is desirable are unlikely to be effective, since they appear already convinced. Yet, few couples are married within a year of a nonmarital birth. The issue seems to be whether the conditions they set for marriage are met. Our analysis suggests that policies that either improve their economic situation or the emotional quality of their relationships could encourage the maintenance of romantic or cohabitational unions—and the movement to marriage—at modest levels. Our finding that women have higher levels of distrust of the other sex than men do, and that women's distrust deters marriage, suggests that programs may need to deal with changing the aspects of men's behavior that are

[27] Of course, this simulation assumes that the effects of parents' characteristics on marriage would be the same for parents who did not marry as we have observed for those who did; this 'unobserved heterogeneity' may upwardly bias the estimates we present here.

generating the distrust if unions are to be encouraged. While our analysis, with its extensive controls, including for relationship status a year earlier, suggests that resources, trust, and relationship quality have causal effects on union formation and dissolution, we cannot be sure of this. Experiments with random assignment to services intended to increase income or relationship quality would provide the best test of whether programs offering such services could help fragile families stay together. Absent such "gold standard" evidence, our results are suggestive that both economic resources and the emotional skills that facilitate relationship quality promote relationship stability among fragile families.

APPENDIX A

Appendix Table A shows regression estimates for how parents' background characteristics affect their relationship one year after a nonmarital birth. The odds of being in a higher order relationship status are consistently higher for all non-black groups. The differences are greater as we move up the relationship status hierarchy. The odds of being married are two to three times as high for other groups as compared to blacks. Overall, net of other measured variables, the chances of moving to a higher-level status are much lower for blacks and the chances of breaking up are higher. Mixed-race couples are just as likely as other couples to stay romantically involved or be living together but less likely to get married. Age has essentially no effect on parents' union formation. Growing up with both biological parents increases the odds of being higher on the relationship hierarchy for mothers. (The signs and sizes of the ratios for marriage are similar to those for cohabitation and romantic involvement, although the latter are not statistically significant.) In contrast, coming from a two-parent family has no effect on men's status, except for marriage, where it reduces the odds. The latter effect is surprising, since we would expect parents' marital behavior to be correlated with their own experiences growing up. Perhaps fathers from traditional family backgrounds face social pressures not to marry a woman with whom they have had a nonmarital child because of stigma. Alternatively, perhaps the fathers in this group who have not married by baseline are a select group of men who are particularly averse to marriage.

Parents' fertility history also affects union formation. Having other children together significantly increases family stability at every level, whereas fathers' having children with other women reduces stability. Since children typically live with mothers, his children (who likely live with his previous partner) may pull him away from investing in his current partner. Or, the fact

that he has children with another woman may be a proxy for his infidelity. Interestingly, her children (who likely live with her) do not deter union formation. Thus, there is no support for the idea that men avoid relationships in which they will have to serve as step-fathers and support other men's children. There is no effect of mothers' health on relationship status. Fathers' good health has no effect on co-residence or marriage, but slightly discourages romantic involvement.

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Table 1. Sample Frequencies and Means by Relationship Status at Time of Child's Birth [1]

	Total	Cohabiting	Visiting	Not romantic
Background Characteristics				
Couple's race/ethnicity				
Non-Hispanic white	14.6	18.8	8.0	16.2
Non-Hispanic black	55.2	44.4	70.0	56.0
Hispanic	27.5	34.0	19.9	25.0
Other	2.6	2.9	2.2	2.9
Parents are of different race/ethnicity	13.7	13.4	12.9	16.3
Mother's age				
Under 20	22.8	18.2	28.2	24.6
20-24	41.9	43.9	39.7	40.8
25-29	20.3	21.3	18.1	21.9
30 and older	15.0	16.6	14.0	12.8
Mean age (sd)	23.82 (5.55)	24.22 (5.47)	23.40 (5.69)	23.57 (5.43)
Father's age (mother report)				
Under 20	11.1	8.2	14.4	12.9
20-24	36.8	37.2	37.1	35.2
25-29	25.5	25.0	25.0	27.7
30 and older	26.6	29.6	23.5	24.2
Mean age	26.61 (7.12)	26.99 (6.80)	26.11 (7.44)	26.56 (7.27)
Family background				
Mother lived with both parents age 15	36.0	40.1	31.4	33.9
Father lived with both parents age 15	39.1	42.5	35.1	32.3
Parents' other children				
Parents have other biological children together	31.4	38.2	27.3	19.7
Mother has children with another man	42.4	41.4	43.6	42.5
Father has children with another woman	35.2	33.2	38.9	34.7
Mother's self-reported health				
Poor	0.7	0.7	0.7	0.9
Fair	7.8	7.9	7.1	8.9
Good	28.0	28.7	26.7	28.4
Very good	33.3	32.7	33.6	34.2
Excellent	30.2	30.0	31.9	27.6
Father's self-reported health				
Poor	0.7	0.4	0.9	1.3
Fair	7.2	7.6	5.9	10.1
Good	21.9	22.4	21.4	21.2
Very good	36.8	38.0	37.2	27.3
Excellent	33.4	31.6	34.6	40.1

(table continued next page)

Table 1 (cont.). Sample Frequencies and Means by Relationship Status at Time of Child's Birth [1]

	Total	Cohabiting	Visiting	Not romantic
Earnings-Related Variables				
Mean predicted wages				
Mother	$8.67 (2.77)	$8.79 (2.85)	$8.59 (2.63)	$8.52 (2.80)
Father	$11.09 (3.41)	$11.43 (3.63)	$10.69 (3.00)	$10.97 (3.45)
Mother's education				
Less than high school	39.9	39.1	40.4	41.3
High school or the equivalent	33.9	34.2	34.3	32.4
Some college or higher	26.2	26.7	25.4	26.3
Father's education (mother report)				
Less than high school	37.9	38.9	37.2	36.4
High school or the equivalent	38.2	35.1	42.5	38.3
Some college or higher	23.9	26.0	20.4	25.3
Employment status				
Mother worked last year	78.8	79.8	75.8	82.0
Father worked last week (mother report)	77.3	81.8	72.5	71.7
Attitudes and Beliefs				
Positive attitudes about marriage (range=1-4)				
Mother	2.68 (.56)	2.65 (.56)	2.71 (.57)	2.68 (.58)
Father	2.79 (.56)	2.78 (.56)	2.82 (.58)	2.70 (.52)
Traditional gender role attitudes (range=1-4)				
Mother	2.03 (.60)	2.06 (.60)	2.02 (.60)	1.97 (.58)
Father	2.35 (.63)	2.36 (.62)	2.36 (.64)	2.30 (.65)
Distrust of other gender (range=1-4)				
Mother	2.09 (.56)	2.04 (.54)	2.10 (.54)	2.24 (.64)
Father	1.99 (.54)	1.99 (.54)	1.99 (.55)	1.99 (.57)
Frequency of church attendance (range=1-5)				
Mother	2.90 (1.35)	2.81 (1.30)	2.99 (1.38)	2.95 (1.41)
Father	2.65 (1.29)	2.62 (1.27)	2.70 (1.29)	2.74 (1.38)
Parents' Relationship Quality				
Physical violence				
Father hits/slaps (reported by mother)	4.3	2.9	3.2	10.7
Mother hits/slaps (reported by father)	15.0	13.6	18.1	11.9
Frequency of conflict between them (range=1-3)				
Mother's report	1.47 (.40)	1.42 (1.42)	1.48 (.42)	1.60 (.46)
Father's report	1.45 (.38)	1.41 (1.41)	1.51 (.40)	1.55 (.41)
Level of supportiveness of other parent (range=1-3)				
Mother's report about father	2.58 (.42)	2.70 (.33)	2.58 (.39)	2.22 (.51)
Father's report about mother	2.63 (.38)	2.68 (.33)	2.60 (.40)	2.40 (.50)
Substance problems (both reported by mother)				
Mother has a problem	3.5	2.7	3.5	5.7
Father has a problem	6.2	3.5	5.7	16.2
Number of cases *(n)*	3,279	1,580	1,137	562

[1] Standard deviations on means are shown in parentheses.

Table 2. Relationship Status at Birth and One Year Later for Mothers Unmarried at Baby's Birth

	One Year after Birth of Child					
Time of Birth	Married	Cohabiting	Visiting	Friends	No Rel.	Number of Cases (*n*)
Cohabiting	14.6	59.6	4.6	10.9	10.4	1,580
Visiting	5.3	32.2	14.0	25.6	23.0	1,137
Friends	1.2	9.2	3.5	44.1	42.2	261
No Relationship	1.7	6.3	4.3	22.9	64.8	301
Number of cases (*n*)	298	1,351	253	647	730	3,279

Notes: Cohabitation is measured with more detail at one year than at the baseline interview. At the time of the baby's birth, couples are counted as cohabiting if the mother answers "yes" to the question of whether they are living together; at 12 months, they are counted as cohabiting if the mother reports that they live together "all or most of the time" or "some of the time." Visiting couples are those who report they are romantically involved but living separately. Couples considered as friends reported they are "just friends." Parents' having "no relationship" at baseline is determined by the mother reporting that she "hardly ever" or "never" talks with the father; at 12 months, this category is based on the mother reporting that she is "not in any kind of relationship" with the father or "separated/divorced" from him.

Table 3. Results from Generalized Ordered Logit Models (Odds Ratios) Predicting Parents' Relationship Status at One-Year Follow-Up

	Romantic			Coresident			Married		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Relationship at baseline (reference=non-romantic)									
Visiting		5.446 **	4.466 **		5.280 **	3.592 **		4.080 **	2.998 *
Cohabiting		14.370 **	10.422 **		19.777 **	12.717 **		7.728 **	5.640 **
Earnings-Related Variables									
Predicted hourly wages									
Mother's	1.018	1.021	1.020	1.011	1.023	1.020	1.004	1.007	1.017
Father's	1.037 +	1.023	1.015	1.045 *	1.028	1.017	1.042	1.035	1.050 +
Education (reference = less than high school)									
Mother high school degree	1.133	1.204 +	1.250 *	1.228 *	1.252 *	1.271 *	1.327 +	1.333 +	1.347
Mother some college+	1.138	1.265 +	1.314 +	1.065	1.080	1.100	1.227	1.232	1.119
Father high school degree	.895	.933	.918	.800 *	.825 +	.804 *	.948	.967	.874
Father some college+	.787 +	.801	.830	.801 +	.816	.816	1.528 *	1.567 *	1.370
Employment status									
Mother worked last year	1.131	1.186	1.139	1.131	1.160	1.146	.880	.873	.824
Father worked last week	1.317 **	1.144	.976	1.517 **	1.410 **	1.289 *	1.524 *	1.446 +	1.262
Attitudes and Beliefs									
Positive attitudes about marriage (1-4) -- Mother			1.077			1.071			1.770 **
Father			1.057			1.027			1.449 **
Traditional gender role attitudes (1-4) -- Mother			1.040			1.084			1.224
Father			1.172 +			1.002			.972
Distrust of other gender (1-4) -- Mother			.828 *			.760 **			.597 **
Father			1.010			1.008			1.031
Frequency of church attendance (1-5) -- Mother			1.022			1.001			1.139 *
Father			.952			.951			1.142 *
Parents' Relationship Quality									
Physical violence									
Father hits/slaps (reported by mother)			.442 **			2.215 *			1.722
Mother hits/slaps (reported by father)			.987			1.093			.696
Frequency of conflict between them									
Mother's report			.949			.977			1.061
Father's report			.626 **			.678 **			.974
Level of supportiveness of other parent									
Mother's report about father			1.815 **			1.782 **			1.862 *
Father's report about mother			1.644 **			1.938 **			1.492 +
Substance problems (both reported by mother)									
Mother has a problem			.715			1.074			1.187
Father has a problem			.802			.443 **			.672
Father not interviewed	.288 **	.512 **	.506 **	.240 **	.447 **	.459 **	.321 **	.475 **	.589 +

$+p<.10$ $*p<.05$ $**p<.01$ (two-tailed tests)

Note: In addition to the variables shown, all models include variables for parents' race/ethnicity, age, family background, fertility history, and self-reported health status. Results for these variables are shown in Appendix Table A.

Table 4. Alternative Earnings Capacity Specifications for Generalized Order Logit Models (Odds Ratios) Predicting Parents' Relationship Status at One-Year Follow-Up

	Romantic		Coresident		Married	
	Model 2	Model 3	Model 2	Model 3	Model 2	Model 3
Predicted wages (Results shown in Table 3) (n=3,140)						
Mother's predicted wage	1.021	1.020	1.023	1.020	1.007	1.017
Father's predicted wage	1.023	1.015	1.028	1.017	1.035	1.050 +
Predicted wages not controlling for employment status (n=3,140)						
Mother's predicted wage	1.020	1.022	1.018	1.014	1.008	1.018
Father's predicted wage	1.022	1.010	1.029	1.017	1.039	1.056 *
Predicted wages using sub-sample that has actual wage without employment status (n=1,582)						
Mother's predicted wage	1.050	1.069	1.077 *	1.086 *	1.007	1.006
Father's predicted wage	1.039	.995	1.046 +	1.037	1.038	1.047
Actual wages without employment status (n=1,598)						
Mother's actual wage	1.037 *	1.039 *	1.033 *	1.035 *	1.024 +	1.029 +
Father's actual wage	1.009	1.012	.995	.992	.996	.993
Predicted wage: ratio and sum, without employment status (n=3,140)						
Mom/dad wage ratio	1.098	1.183	1.027	1.107	.953	.928
Mom + dad wages	1.022	1.016	1.025 +	1.016	1.028	1.042 *
Actual wage: ratio and sum, without employment status (n=1,598)						
Mom/dad wage ratio	1.129	1.127	1.072	1.079	1.126	1.118
Mom + dad wages	1.017 *	1.021 *	1.005	1.004	1.007	1.006
Education only, without employment status or wages (n=3,200)						
Education (reference=less than high school)						
Mother high school	1.217 +	1.259 *	1.239 *	1.240 *	1.316 +	1.316
Mother some college or higher	1.414 **	1.470 **	1.199	1.178	1.301	1.186
Father high school	.981	.961	.896	.837 +	1.034	.932
Father some college or higher	.879	.863	.937	.910	1.784 **	1.597 *

+p <.10 *p <.05 **p <.01 (two-tailed tests)

Note: All variables in Models 2 and 3 in Table 3 are included here, respectively, except that employment status is removed from models where indicated, predicted wage replaced by actual wage, mom/dad wage ratio, or sum of mom and dad's wage where indicated. Note varying Ns of models.

Appendix A. Results from Generalized Ordered Logit Models (Odds Ratios)
Predicting Parents' Relationship Status at One-Year Follow-Up

	Romantic			Coresident			Married		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Background Characteristics									
Mother's race (reference = black non-Hispanic)									
White non-Hispanic	1.315 *	1.171 *	1.143	1.526 **	1.264 +	1.322 +	2.080 **	1.880 **	2.386 **
Hispanic	1.533 **	1.270	1.252 +	1.854 **	1.582 **	1.545 **	2.438 **	2.209 **	2.485 **
Other non-Hispanic	.950	.837	.777	1.148	.949	1.031	2.339 *	2.148 +	2.626 **
Parents are of different race	.887	.938	.987	.937	1.067	1.111	.704 +	.734	.685 +
Age									
Mother's age	1.000	.996	1.001	.990	.978	.982	1.021	1.017	1.020
Father's age	.992	.992	.991	1.000	1.006	1.009	.996	.997	.993
Family background									
Mother lived with both parents age 15	1.239 *	1.264 *	1.269 *	1.265 **	1.268 *	1.250 *	1.201	1.177	1.203
Father lived with both parents age 15	1.230 *	1.281 *	1.199	1.106	1.019	.998	.775 +	.744 *	.648 **
Other children (reference = none)									
Parents have other children together	1.733 **	1.422 **	1.556 **	1.667 **	1.283 **	1.466 **	1.348 *	1.186	1.305 +
Mother has children with another man	.944	.934	.968	1.023	1.025	1.053	.847	.849	.881
Father has children with another woman	.778 *	.731 **	.754 *	.797 *	.770 *	.732 **	.662 *	.658 *	.626 **
Self-reported health status (range=1-5)									
Mother's health	1.053	1.059	1.000	1.030	1.019	.946	1.005	.998	.955
Father's health	.938	.903 *	.856 **	.986	.997	.968	1.043	1.054	1.020

$+p<.10$ $*p<.05$ $**p<.01$

Note: These models include all the variables shown in the respective models in Table 3: Model 1 includes only the demographic and earnings-related variables; Model 2 adds the baseline relationship status; Model 3 adds the attitudinal and relationship quality variables.

Appendix B. Correlation Matrix

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
(1)	Not romantic at 1 year	1.00																													
(2)	Visiting at 1 year	**-.25**	1.00																												
(3)	Cohabiting at 1 year	**-.71**	**-.24**	1.00																											
(4)	Married at 1 year	**-.27**	**-.09**	**-.27**	1.00																										
(5)	White	**-.05**	**-.04**	.03	**.06**	1.00																									
(6)	Hispanic	**-.10**	**-.07**	**.08**	**.10**	**-.26**	1.00																								
(7)	Other race	.00	.00	-.01	.02	**-.07**	**-.10**	1.00																							
(8)	Different race	.02	-.02	-.01	.00	**.22**	.03	**.22**	1.00																						
(9)	Mom age	-.03	.00	.00	.05	-.01	.01	.01	-.02	1.00																					
(10)	Dad age	-.01	-.01	.00	.03	.02	-.03	-.02	-.01	**.69**	1.00																				
(11)	M both parents at 15	**-.09**	-.01	**.05**	**.06**	**.07**	**.18**	.01	-.03	**.13**	**.09**	1.00																			
(12)	D both parents at 15	**-.07**	.01	**.05**	.03	**.05**	**.18**	.02	**-.05**	**.11**	**.12**	**.11**	1.00																		
(13)	Other bio kids together	**-.11**	.01	**.09**	.03	**-.08**	**.04**	-.01	-.03	**.12**	**.08**	.00	-.02	1.00																	
(14)	M kids w/ other partner	**.04**	-.03	.00	**-.04**	**-.06**	**-.10**	-.02	-.02	**.33**	**.25**	**-.08**	.00	**-.07**	1.00																
(15)	D kids w/ other partner	**.06**	.01	-.03	-.07	-.03	**-.08**	**-.05**	.00	**.16**	**.27**	**-.05**	**-.05**	.01	**.17**	1.00															
(16)	Mom predicted wage	**-.05**	.03	.00	.06	**.18**	**-.15**	**.11**	**.07**	**.64**	**.45**	**.12**	**.09**	-.02	**.08**	**.08**	1.00														
(17)	Dad predicted wage	**-.05**	-.03	.01	.10	**.26**	**-.06**	**.05**	**.06**	**.45**	**.57**	**.11**	**.15**	**-.06**	**.08**	**.08**	**.55**	1.00													
(18)	Mom high school	-.01	-.01	.01	**.01**	.01	**-.09**	-.03	-.03	.02	.02	-.01	-.02	.01	.03	**.04**	**-.15**	-.01	1.00												
(19)	Mom college	**-.04**	**.05**	-.01	**.04**	**.08**	**-.09**	**.04**	**.07**	**.20**	**.13**	**.08**	**.04**	**-.10**	**-.06**	.01	**.53**	**.27**	**-.43**	1.00											
(20)	Dad high school	.00	**.04**	.00	**-.04**	-.03	**-.13**	.00	-.02	**-.04**	-.03	**-.05**	**-.04**	-.03	.01	.01	**-.04**	**-.06**	**.13**	**-.04**	1.00										
(21)	Dad college	-.03	-.01	-.02	.10	**.10**	**-.06**	**.04**	**.12**	**.14**	**.16**	**.04**	**.10**	**-.06**	-.02	.01	**.25**	**.42**	-.02	**.29**	**-.41**	1.00									
(22)	Mom worked last year	-.02	-.01	.02	**.00**	**.09**	**-.08**	.01	.02	-.01	**-.05**	.00	.01	**-.10**	**-.06**	.02	**.04**	.03	**.09**	**.17**	.03	**.12**	1.00								
(23)	Dad worked last week	**-.08**	**-.04**	**.05**	.07	**.07**	**.08**	.01	-.01	**.09**	**.11**	**.07**	**.11**	**-.04**	.00	-.01	**.08**	**.15**	.00	**.09**	.02	**.10**	**.06**	1.00							
(24)	Mom health	-.02	.02	.01	**.01**	**.04**	**-.10**	-.02	.00	-.02	**-.04**	.00	.00	-.03	**-.06**	.00	**.17**	**.04**	.02	**.13**	.03	**.08**	**.09**	-.01	1.00						
(25)	Dad health	.02	-.01	-.02	**.00**	.02	**-.09**	.03	.02	**-.05**	**-.05**	-.01	.03	-.02	-.03	-.02	.02	.03	.01	**.04**	**.04**	**.09**	.03	**.06**	**.10**	1.00					
(26)	M marriage attitudes	.00	.02	**-.06**	.08	**-.08**	**-.06**	.01	**-.04**	.01	.01	.01	-.01	-.01	.02	.02	-.01	**-.04**	.01	.03	.03	.02	-.01	-.01	.00	.00	1.00				
(27)	D marriage attitudes	-.03	.00	-.02	.09	-.03	-.01	.03	.00	.00	.03	-.02	**.08**	-.02	.03	.02	.01	.02	**-.04**	**.04**	.00	.03	-.01	**.04**	-.01	.02	**.16**	1.00			
(28)	M traditional gender att.	**-.04**	-.01	.02	**.05**	**-.08**	**.17**	.00	**-.07**	**.10**	**.09**	**.10**	**.07**	**.04**	.03	.00	**-.04**	-.01	**-.05**	**-.15**	**-.05**	**-.05**	**-.16**	.01	**-.06**	-.01	**.16**	**.07**	1.00		
(29)	D traditional gender att.	-.03	.02	.01	.01	**-.06**	**.10**	.00	**-.06**	.01	.01	**.04**	**.07**	**.05**	**.05**	-.02	**-.08**	**-.08**	**-.04**	**-.09**	-.02	**-.11**	**-.09**	.02	**-.05**	**-.07**	**.04**	**.11**	**.16**	1.00	
(30)	M gender distrust	**.12**	.01	**-.07**	**-.09**	**-.13**	**.12**	.01	-.03	**.06**	**.04**	.02	**.04**	**.04**	**.06**	**.04**	**-.05**	**-.06**	-.02	**-.14**	**-.05**	**-.10**	**-.13**	**-.06**	**-.12**	**-.03**	.03	.01	**.28**	**.08**	1.00
(31)	D gender distrust	.02	.00	.00	-.03	**-.06**	.02	-.02	-.03	-.01	-.03	.01	.00	.03	**.05**	.00	-.03	**-.07**	-.03	**-.05**	-.02	**-.10**	**-.06**	-.03	**-.04**	**-.05**	.01	-.01	**.05**	**.20**	**.11**
(32)	M religious attendance	-.01	**.06**	**-.07**	**.08**	**-.10**	.01	.00	**-.06**	**.09**	**.05**	**.07**	**.04**	.00	-.02	.00	**.08**	-.02	.00	**.11**	**.04**	.02	**.06**	**.06**	.01	.00	**.21**	**.08**	**.09**	**.04**	.00
(33)	D religious attendance	.02	.03	**-.08**	**.07**	**-.10**	.02	.01	-.02	**.05**	**.04**	-.01	**.10**	-.02	.01	.00	.02	-.01	-.03	**.04**	.00	**.08**	.02	**.05**	-.01	**.04**	**.10**	**.18**	**.06**	**.09**	.01
(34)	M father is violent	**.09**	**-.04**	**-.05**	-.03	**-.04**	**.05**	.01	.00	.00	.03	.00	-.02	**.05**	.01	**.06**	**-.04**	**-.05**	-.01	-.03	**-.07**	-.02	-.01	**-.06**	-.02	.01	**.04**	-.02	**.04**	.01	**.10**
(35)	D mother is violent	**.05**	-.02	.00	**-.06**	-.03	-.02	.01	-.01	**-.04**	-.02	-.01	**-.04**	.03	.01	.00	**-.05**	**-.06**	.00	**-.06**	-.01	**-.06**	-.03	**-.06**	-.02	**-.05**	.01	.00	.01	.02	**.05**
(36)	M frequency of conflict	**.14**	-.01	**-.09**	**-.08**	-.02	**-.06**	.00	.03	.03	.01	**-.04**	**-.08**	**.08**	**.05**	**.04**	**-.05**	**-.07**	.01	-.03	-.01	**-.04**	**-.05**	**-.11**	**-.08**	-.01	**.04**	-.03	-.02	.00	**.14**
(37)	D frequency of conflict	**.13**	.01	**-.10**	**-.07**	-.01	**-.09**	-.01	.02	-.03	**-.04**	**-.06**	**-.10**	**.06**	.03	**.04**	**-.04**	**-.07**	.03	-.01	.03	-.03	-.02	**-.06**	**-.03**	**-.10**	.02	**-.06**	-.03	.02	**.06**
(38)	M father's supprtvness	**-.29**	.00	**.21**	**.14**	.02	**.04**	-.01	-.01	-.03	-.02	**.05**	**.05**	-.02	-.03	**-.04**	.02	**.06**	.00	.03	.03	**.07**	.01	**.12**	**.10**	.02	-.02	**.05**	-.01	-.02	**-.20**
(39)	D mother's supprtvness	**-.16**	-.01	**.12**	**.08**	**.03**	**.04**	.00	.01	-.01	-.01	.03	**.08**	**-.05**	-.02	.02	.02	**.04**	.01	.03	.00	.02	**.04**	**.04**	.03	**.07**	.01	**.10**	.00	**-.06**	**-.08**
(40)	Mom substance prob.	**.05**	-.02	**-.03**	-.01	**.05**	-.03	.02	.03	**.08**	**.10**	-.01	.01	-.01	**.04**	.02	-.01	**.04**	-.03	-.02	-.03	.00	**-.04**	-.03	**-.06**	.00	.00	.03	.00	.03	.01
(41)	Dad substance prob.	**.12**	.00	**-.10**	**-.05**	**.05**	.01	-.01	**.04**	.02	.02	.00	-.02	.03	.03	**.05**	-.01	**-.08**	-.01	.00	-.03	**-.07**	.00	**-.14**	**-.04**	-.01	.02	-.03	.02	-.02	**.10**
(42)	Father not interviewed	**.30**	.02	**-.25**	**-.11**	**-.04**	-.02	-.01	.02	.03	**.05**	-.01	.00	**-.04**	.00	.02	.00	.02	**-.04**	-.01	-.01	**-.07**	-.03	-.01	-.01	.00	-.01	.00	.00	.01	**.11**
(43)	Visiting at birth	**.10**	**.17**	**-.13**	**-.10**	**-.14**	**-.13**	-.02	-.02	**-.06**	**-.05**	**-.07**	**-.05**	**-.06**	.02	**.05**	-.02	**-.09**	.01	-.01	**.07**	**-.06**	**-.05**	**-.08**	.03	.02	**.04**	**.04**	-.01	.01	.00
(44)	Cohabiting at birth	**-.41**	**-.11**	**.36**	**.18**	**.11**	**.14**	.01	-.01	**.07**	**.05**	**.08**	**.07**	**.14**	-.02	**-.04**	**.04**	**.10**	.01	.01	-.03	**.07**	.02	**.11**	-.01	-.02	**-.04**	-.01	**.05**	.01	**-.09**

Note: Correlations in bold are statistically significant at $p < .05$ (two-tailed tests).

Appendix B (cont.). Correlation Matrix

		(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)
(31)	D gender distrust	1.00													
(32)	M religious attendance	.02	1.00												
(33)	D religious attendance	.02	**.27**	1.00											
(34)	M father is violent	.02	**-.05**	-.01	1.00										
(35)	D mother is violent	**.11**	**-.04**	**-.05**	**.07**	1.00									
(36)	M frequency of conflict	**.05**	**-.08**	**-.05**	**.23**	**.10**	1.00								
(37)	D frequency of conflict	**.12**	-.02	**-.07**	**.05**	**.18**	**.26**	1.00							
(38)	M father's supprtvness	**-.04**	**.05**	.02	**-.23**	**-.08**	**-.35**	**-.16**	1.00						
(39)	D mother's supprtvness	**-.16**	.02	**.05**	**-.06**	**-.21**	**-.18**	**-.29**	**.20**	1.00					
(40)	Mom substance prob.	.01	-.01	.02	**.10**	**.04**	**.12**	.03	**-.05**	-.02	1.00				
(41)	Dad substance prob.	.02	.01	.00	**.16**	.03	**.21**	**.08**	**-.24**	**-.04**	**.15**	1.00			
(42)	Father not interviewed	.01	.02	.02	**.04**	.00	.01	.00	**-.23**	.00	.02	**.08**	1.00		
(43)	Visiting at birth	.00	**.05**	.02	**-.04**	**.05**	.02	**.09**	.00	**-.05**	.00	-.02	**.04**	1.00	
(44)	Cohabiting at birth	.00	**-.06**	**-.04**	**-.07**	**-.04**	**-.12**	**-.13**	**.28**	**.14**	**-.04**	**-.11**	**-.34**	**-.70**	1.00

Note: Correlations in bold are statistically significant at p <.05 (two-tailed tests).